

DOK Table

## Depth of Knowledge Levels

DOK Level	Some Verbs That Might Illustrate the Level	Stems that might illustrate the level:
<b>Level 1: Recall-Reproduction</b> Level 1 DOK involves well defined, typically one-step responses or procedures. Knowledge required would automatically provide the answer. The student would not have to “figure out” anything.	<b>Level 1 verbs:</b> Recall, reproduce, identify, recognize, calculate, measure	<b>Level 1:</b> <ul style="list-style-type: none"> <li>• Make or identify accurate statements about . . .</li> <li>• Identify the characteristics of . . .</li> <li>• Calculate . . .</li> <li>• Recognize or describe . . .</li> <li>• Provide a definition of . . .</li> </ul>
<b>Level 2 Skills &amp; Concepts:</b> Level 2 DOK requires that students make decision as to how they will approach the question or problem. Level 2 tasks are more complex than Level 1 and typically require more than one step in order to respond.	<b>Level 2 verbs:</b> Classify, organize, create a graphic representation, estimate, collect and display, use a model, compare, explain a relationship, give examples and non-examples, predict and explain, or conduct teacher-directed investigation	<b>Level 2:</b> <ul style="list-style-type: none"> <li>• Support or clarify the concept . . . with appropriate examples.</li> <li>• Identify or describe similarities and differences between/among . . .</li> <li>• Classify or order . . . based on characteristics and properties.</li> <li>• Use diagrams or models to demonstrate understanding of . . .</li> <li>• Relate knowledge of . . . to observed or inferred properties.</li> <li>• Identify/use science relationships to find qualitative or quantitative solutions involving the direct demonstration of . . .</li> </ul>
<b>Level 3: Strategic Thinking</b> Level 3 DOK requires more demanding reasoning on the part of the student. Application of the concept would be more complex and abstract at Level 3 than Level 2. Frequently, Level 3 tasks have more than one strategy or solution. Students would be required to justify the strategy or solution they chose.	<b>Level 3 verbs:</b> Explain their thinking, justify a response, draw a conclusion, develop a logical argument, use concepts to solve non-routine problems, design an investigation, develop a model, or collect evidence and justify a conclusion	<b>Level 3:</b> <ul style="list-style-type: none"> <li>• Provide solutions to problems that require consideration of a number of different factors related to . . .</li> <li>• Combine knowledge of . . . with information from experience or observation to formulate questions/hypotheses that can be answered by an investigation.</li> <li>• Design/plan investigations appropriate to answering scientific questions related to . . .</li> <li>• Describe/summarize data trends related to . . .</li> <li>• Make valid inferences on the basis of evidence or understanding of . . .</li> <li>• Use evidence and scientific understanding of . . . to justify explanations.</li> </ul>
<b>Level 4: Extended Thinking</b> Level 4 DOK requires high cognitive demands that are very complex. Students would be required to relate ideas within or among content areas and develop generalizations based on research and application of concepts.	<b>Level 4:</b> Tasks would be developed by teachers and schools as an extension of Level 3 GE's.	<b>Level 4:</b> <ul style="list-style-type: none"> <li>• Make associations and connections of . . . across different areas of science.</li> <li>• Make and evaluate general conclusions related to . . . that go beyond experimental or given conditions.</li> <li>• Use scientific understanding and knowledge of social issues related to . . . in order to evaluate alternative explanations, problem-solving strategies, and solutions.</li> <li>• Plan, conduct and report a scientific study related to . . .</li> </ul>

*Modified from Norman Webb. 2002. 'Depth-or-Knowledge Levels for Four Content Areas'*